

Claims 1-4 and 6-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamagishi et al. Regarding claim 1, Yamagishi discloses a golf ball comprising a dual core and a single outer cover. The dual core comprises a center component (12) and a core layer (13) (fig 2). The center component is made from a thermoset material and the core layer is made from a thermoplastic. The outer cover layer has a Shore D hardness from 40 to 60. Regarding claim 1, 4, and 6, the thermoset material for the core component is a polybutadiene and the thermoplastic material for the core layer is an ionomer. Regarding claim 3, the core may comprise of at least two layers (col 2, lines 57-60). Regarding claim 7, the center component has a diameter from 0.787 to 1.535 inches and the core component and core layer have a diameter from 1.378 to 1.614 inches. Regarding claims 8 and 9, Yamagishi discloses a variety of inert fillers that may be added to the core layers that are commonly known for increasing/decreasing density (col 5, lines 1-9).

However, Yamagishi discloses a dual core and a dual cover (i.e., two cover layers) golf ball, not the dual core and single cover layer golf ball as now more particularly set forth in amended independent claim 1. In this regard, Yamagishi goes into great detail explaining why the particular multilayer or two-layer cover construction is utilized. For example, Yamagishi et al. states the following in column 2, lines 25-56.

As defined above, the golf ball of the invention uses a two-layer cover wherein the outer cover layer has a hardness of 40 to 60 degrees on Shore D and the inner cover layer has a hardness of up to 53 degrees on Shore D and lower than that of the outer cover layer. Differently states, inside a soft outer cover layer is formed a softer inner cover layer. This is one of the features of the invention. With the ball wherein the inner cover layer which is softer than the outer cover layer lies inside the outer cover layer which is soft in itself is subject to a driver shot providing a great value of F/N indicating that the perpendicular force F is greater than the parallel force N , a compressive force acts on the inner cover layer to a greater extent and a force in shearing direction is smaller than the compressive force. Since soft layers are provided in the compression direction, the feel upon hitting is very soft and comparable to the feel of the wound balata golf ball. In addition, since the force in the shearing direction is small, the reaction force at the same

site is small enough to restrain too much spinning. This ensures a low spin, flat and long-extending ball trajectory and carry that solid golf balls inherently possess.

On the other hand, when a club having a greater loft is used, the force in a shearing direction increases relative to the compressive force. Since the inner cover layer is formed as a softer layer, the amount of local deformation in a shearing direction increases in response to the shearing force. This restrains the slip phenomenon which is the drawback of solid golf balls. The resultant spin performance is approximate to that of the wound golf ball rather than the prior art solid golf balls designed in pursuit of spin performance. Thus, the ball can respond an intentional shot.

Since the present invention set forth in amended claim 1 having a single cover construction, differs drastically from the particular two or more layer construction of Yamagishi et al., the Examiner's rejection concerning claims 1-4 and 6-9 under 35 U.S.C. § 102(e) has been overcome. Withdrawal of this rejection is also respectfully requested.

Rejection of Claims 10-13 and 15-18 as Allegedly Being Obvious

Claims 10-13 and 15-18 were rejected by the Examiner as reportedly being obvious and unpatentable over Yamagishi et al. (U.S. Patent No. 5,688,595) in view of Maruko et al. (U.S. Patent No. 5,752,888) under 35 U.S.C. § 103. Specifically, the Examiner indicated the following:

Claims 10-13 and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamagishi et al in view of Maruko et al '888. Regarding claim 10, Yamagishi discloses a golf ball comprising a dual core and a single outer cover. The dual core comprises a center component (12) and a core layer (13 (fig 2). The center component is made from a thermoset material and the core layer is made from a thermoplastic. The outer cover layer has a Shore D hardness from 40 to 60. Regarding claim 11, 13, and 15, the thermoset material for the core component is a polybutadiene and the thermoplastic material for the core layer is an ionomer. Regarding claim 12, the core may comprise of at least two layers (col 2, lines 57-60). Regarding claim 16, the

center component has a diameter from 0.787 to 1.535 inches and the core component and core layer have a diameter from 1.378 to 1.614 inches. Regarding claims 17 and 18, Yamagishi discloses a variety of inert fillers that may be added to the core layers that are commonly known for increasing/decreasing density (col 5, lines 1-9). Yamagishi does not disclose an inner cover layer with a Shore D hardness greater than 60 or more as in claim 10. Maruko teaches an inner cover layer with a Shore D hardness greater than 60 and an outer cover layer Shore D hardness from 43 to 53. One skilled in the art would have modified the hardness of the inner cover layer to achieve the desired flight characteristics of the golf ball.

However, Applicants respectfully disagree with the Examiner's conclusion that the invention set forth in claims 10-13 and 15-18 is disclosed by the combination of the thread wound core ball of Maruko et al. and the solid, dual core ball of Yamagishi et al. Moreover, it is also Applicant's position that there is no motivation, teaching or suggestion to combine Maruko et al. with Yamagishi et al., or visa versa.

More particularly, Yamagishi et al. is directed to a solid golf ball having a dual core and a soft multi-layer cover having a soft inner cover layer and a soft outer cover layer to provide a soft feel and good spin and distance. Yamagishi specifically discloses that the inner cover layer must be even softer than the soft outer cover layer. In turn, Maruko et al. is directed to a thread wound golf ball having a multi-layer cover where the outer cover layer is softer than the hard inner cover layer. Applicants respectfully submit that one skilled in the art would not modify the cover of Yamagishi et al. with the cover of Maruko et al.

In this regard, Maruko et al. is a wound ball, and as Yamagishi et al. states, wound balls and solid golf balls perform differently (see, for example, column 2, lines 52 to 56, and column 3, lines 5 to 13). Additionally, Yamagishi et al. teaches away from golf ball having a soft outer cover and a hard inner cover layer. Yamagishi et al. actually requires the opposite. See, for example, column 2, lines 25 to 58.

Moreover, in the comparative examples, Yamagishi et al. discloses a golf ball having a soft outer cover layer and a harder inner cover layer, as well as a golf ball having a single hard cover, and both balls are rated as "hard" and not soft by the testers (see Table 1, examples CE1 and CE3). These balls are unacceptable according to Yamagishi et al.

Accordingly, Applicants respectfully submit that the Examiner has used impermissible hindsight in order to reconstruct Applicants' invention. As the Examiner may note, it is impermissible to pick and choose from one reference only so much of it as will support a given position to the exclusion of other parts necessary for the full appreciation of what the reference fairly suggests to one skilled in the art. A reference, such as Yamagishi et al. or Maruko et al., must be considered as a whole. One skilled in the art, when considering the references as a whole instead of picking and choosing only the portions that support the rejection, as the Examiner has done, would not be motivated to combine Maruko et al. and Yamagishi et al. Instead, when reading the two references and considering the teachings, one skilled in the art would be led away from combining the cover of Maruko et al. with the cover of Yamagishi et al.

For at least these reasons, Applicants respectfully submit that claims 10-13 and 15-58 are not obvious under 35 U.S.C. § 103(a) over Yamagishi et al. (5,688,595) in view of Maruko et al. (5,752,888). Applicants therefore respectfully request that the rejection of these claims under 35 U.S.C. § 103(a) as being obvious over Yamagishi et al. (5,688,595) in view of Maruko et al. (5,752,888) be reconsidered and withdrawn.

Rejection of Claim 14 as Allegedly Being Obvious

The Examiner also rejected claim 14 as reportedly being obvious and not patentable over Yamagishi et al. (U.S. Patent No. 5,688,595) in view of Maruko et al. (U.S. Patent No. 5,752,888) and Wu (U.S. Patent No. 5,334,673) under 35 U.S.C. § 103. The grounds for this rejection are as follows:

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamagishi in view of Maruko '888 as applied to claims 10-13 and 15-18 above and in further view of Wu '673. Yamagishi in view of Maruko discloses the invention as shown above but does not include polyurethane as an option for the thermoset material (core component). However, Wu teaches a polyurethane golf ball product suitable for the core layer. One skilled in the art would have modified Yamagishi in view of Maruko by including a polyurethane core component to improve the resiliency of the golf ball.

However, for the reasons set forth above, Yamagishi et al. in view of Maruko et al., fails to disclose the claimed invention. Additionally, Wu is directed to polyurethane covered golf balls. Unlike the present invention set forth in claim 14, wherein the thermosetting material is utilized to form the center component of a dual core golf ball, the thermosetting material in Wu is utilized for the cover component. Since these components possess distinctly different properties and/or characteristics, Wu also fails to disclose the claimed invention. Accordingly, Applicants also respectfully request that the Examiner's rejection of claim 14 as being obvious be withdrawn.

CONCLUSION

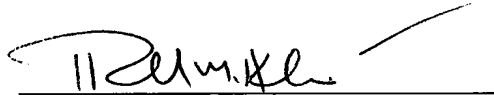
Applicant respectfully requests reconsideration of the allowance of each of the presently rejected claims, claims 1-18.

Attached hereto is a marked-up version of the changes made to the claims by this Amendment. The Examiner is invited to telephone Applicants' attorney if it is deemed that a telephone conversation will hasten prosecution of this application.

Respectfully submitted,

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DATED: December 19, 2002

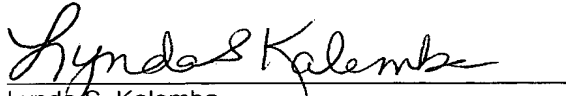


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I hereby certify that this **AMENDMENT** is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" Service under 37 CFR 1.10 on the date indicated above and addressed to the Assistant Commissioner For Patents, Washington, D.C. 20231.



Lynda S. Kalembe

VERSION OF CLAIMS
WITH MARKINGS TO SHOW CHANGES MADE
December 19, 2002

Please amend claims 1 and 10 as follows:

1. (Twice Amended) A golf ball comprising:
a dual core having a center component and a core layer disposed about said center component; and, a cover [layer] disposed about said dual core;
wherein said center component comprises a thermoset material and said core layer comprises a thermoplastic material;
wherein said cover [layer] includes a single [outer] cover layer having a Shore D hardness of from about 40 to [60] 55.

10. (Twice Amended) A multi-layer golf ball comprising:
a dual core having a center component and a core layer disposed about said center component; and a cover [layer] disposed about said dual core;
wherein said center component comprises a thermoset material and said core layer comprises a thermoplastic material;
wherein said cover [layer] includes at least an outer cover layer having a Shore D hardness of from about 50 to 55 and an inner cover layer having a Shore D hardness of 60 or more.